been found to be hydrogen 45 to 50 per cent., hydrocarbons 35 per cent., carbon monoxide 2 to 8 per cent., of these the hydrocarbons have only a slight narcotic effect, and all the other ingredients, except carbon monoxide, are harmless, so that it would seem safe to ascribe to this latter constituent the toxicity. They found in experimenting with frogs that the illuminating gas proved to be much more poisonous than pure carbon monoxide, despite the fact that the former in this instance contained but 9.7 per cent. of the latter. To what illuminating gas owes its increased toxicity it was impossible to decide, owing to its complex composition.—*Archiv für Pathologie und Pharmakologie*, 1902, Band xlviii., p. 106.

PEDIATRICS.

UNDER THE CHARGE OF

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Two Cases of Congenital Disease of the Left Heart.—THEODORE FISHER (*British Medical Journal*, March 15, 1902, p. 639) reports two cases of congenital disease of the left heart in infants, with the post-mortem findings in each case. The first case was a rather small, anæmic male infant, aged fifteen months. There was a slight degree of cyanosis, but no clubbing of the fingers. The mother stated that at birth the child was very blue, and at frequent intervals since had suffered attacks of dyspnœa, upon which occasions cyanosis was marked. The apex-beat was in the fifth interspace, about one-quarter of an inch outside the nipple line. A high-pitched systolic murmur was heard over the entire cardiac area, but was not transmitted beyond the limits of the heart nor heard behind. The second sound at the pulmonary cartilage was sharp, but elsewhere was rather dull. At the apex three sounds were audible, with something of a *bruit de galop* rhythm. At autopsy the heart was found much hypertrophied, the enlargement being mainly of the right ventricle. The pulmonary artery was double the size of the aorta. The tricuspid orifice was unusually large, while the mitral was stenosed, the latter measuring but 5 mm. across. In addition to the thickened and drawn-together flaps of the valves, as in ordinary mitral stenosis, there was present a perforated diaphragm formed by a circular membrane, and attached to the bases of the mitral flaps. The aorta was constricted above the point of entry of the ductus arteriosus. The ductus arteriosus was patent, while the septum ventriculorum and foramen ovale were normal.

The second case was one of aortic stenosis, in an infant, aged four and a half months, in which the segments of the aortic valves were much thickened and adherent to one another. The left ventricle was hypertrophied; the other valvular orifices were normal. An interesting fact in connection with this case was that about three months before the birth of the child the mother had suffered from a painful swelling of the knee, which lasted a few days.

The writer has been able to find few records of cases of congenital mitral stenosis. In the first case described the origin of the perforated diaphragm is obscure. It is difficult to see how it could have been produced by endocarditis, since the membrane did not occupy the usual site of rheumatic vegetations. Instances of congenital aortic stenosis are more numerous, Rauchfuss having recorded twenty-four cases, the majority of which were apparently due to endocarditis. Cases in which two segments of an aortic valve are adherent to one another are not rare, but whether such a condition is due to endocarditis or is a malformation is not clear. It is a curious fact that when only two aortic segments are present the valve is more likely to become affected with endocarditis during adult life than when the normal three segments are present. Parkes Weber argues from this that in some of the cases of aortic disease in adults, where two segments are found adherent, the adhesion has really existed from fœtal life. On the other hand, Fisher has met with specimens in the post-mortem room which illustrate various stages in the development of such adhesions during adult life. The disease is one of adult life, yet it is possible that a similar inflammation may attack the valves of the fœtus. This would be especially probable if one could connect the valvular disease with syphilis, but of such an association there seems to be little evidence. While, however, other causes of fœtal endocarditis besides rheumatism may exist, in the case of congenital disease of the aortic valves recorded above, the thickening, although well marked, resembled that commonly seen in rheumatism, and the history given by the mother leaves little doubt that rheumatism was the cause.

Euquinine in Pediatric Practice.—Rocaz, in a communication to the Société de Médecine et de Chirurgie de Bordeaux, February 14, 1902 (*Revue Mensuelle des Maladies de l'Enfance*, July, 1902, p. 330) considers the availability of this drug for administration to children, because of its almost total lack of unpleasant taste. Euquinine is the ethylcarbonic ether of quinine, occurring as white, needle-like crystals, melting at 203° F., sparingly soluble in water, but very readily in ether, chloroform, and alcohol. With acids it forms salts which are equally insoluble in water, except the chlorhydrate, which is very soluble and has a very unpleasant taste, presenting no advantages over the chlorhydrate of quinine. In his investigations Rocaz has always used the euquinine, and not its salts, administering it in suspension in a coffeespoonful of sugar-water. It was always taken without repugnance. In several cases in which it was thus prescribed and readily taken, the administration of quinine by the mouth had been impossible. It also has the advantage of being well tolerated by the digestive tract even when given in massive doses.

Experiments to test the absorption of euquinine showed that elimination by the urine began between the first and second hour after administration, reaching its maximum after seven hours. These conclusions agree with